

**IN THE CLAIMS:**

Please CANCEL without prejudice or disclaimer claims 1-8 the underlying PCT application and ADD new claims 9-16 in accordance with the following:

Claims 1-8. (cancelled)

9. (new) A method for protection switching and monitoring in a data transmission system by transmitting a working multiplex signal over a working connection and a protection multiplex signal over a protection connection between network elements and at least one of multiplex signal protection switching between the working and protection multiplex signals and path protection switching between path signals along with monitoring performance of selected path signals, comprising:

dividing the working multiplex signal into working path signals and the protection multiplex signal into protection path signals;

routing the working path signals and the protection path signals to only one switching device both for multiplex signal protection switching and for path protection switching,

switching all path signals for the multiplex signal protection switching;

monitoring performance of the working path signals and the protection path signals before the switching device;

accumulating performance values of at least one of the working path signals and associated protection path signals; and

determining a resulting performance value when a monitoring period ends.

10. (new) A method in accordance with claim 9, wherein said monitoring of performance is undertaken separately for the working path signal in a working performance monitoring device and in a protection performance monitoring device for a corresponding protection path signal.

11. (new) A method in accordance with claim 10, wherein said monitoring comprises checking a plurality of protection connections.

12. (new) A method in accordance with claim 10, wherein said monitoring comprises checking only specific parts of at least one of the working multiplex signals and lower granularity path signals.

13. (new) A method in accordance with claim 9,  
wherein said monitoring comprises alarm monitoring of the working path signals and the associated protection path signals before the switching device, and  
passing on alarm criteria of each signal selected.

14. (new) A method in accordance with claim 13, further comprising changing an alarm-criterion of one of a newly selected working path signal and a newly selected protection path signal after protection switching and a checking time has elapsed.

15. (new) A system for protection switching and monitoring in a data transmission system transmitting, between network elements, at least one of a working multiplex signal over a working connection and a protection multiplex signal over a protection connection, and performing at least one of multiplex signal protection switching between the working and protection multiplex signals and path protection switching between path signals along with monitoring performance of selected path signals, comprising:

only one switching device to which the working path signals are routed over working path lines and the protection path signals are routed over protection path lines, with the multiplex signal protection switching being undertaken by switching all path signals;

a working performance monitoring device connected to each of the working path lines;

a protection performance device connected to each of the protection path lines;

an accumulation device accumulating performance values of at least one of the working path signals and associated protection path signals; and

alarm monitoring devices, connected to the accumulation device, determining resulting performance values.

16. (new) A system according to claim 15,  
further comprising alarm switching devices,  
wherein said alarm monitoring devices include working alarm monitoring devices respectively connected to the working path lines and protection alarm monitoring devices respectively connected to one of the protection path lines, where working alarm signals are routed from the working alarm monitoring devices and protection alarm signals are routed from associated protection alarm monitoring devices to the alarm switching devices, respectively, and

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wherein each alarm switching device is activated by an alarm control to which a protection switching signal is routed and a path alarm signal of a newly selected path signal is through connected via a corresponding alarm switching device only after a checking time has elapsed.